

**MINOR SOURCE MODIFICATION  
OFFICE OF AIR MANAGEMENT  
and the  
Evansville Environmental Protection Agency**

**Indian Industries, Inc., dba Escalade Sports  
817 Maxwell Avenue  
Evansville, Indiana 47711**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Minor Source Modification 163-15760-00008	
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: August 13, 2002

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the Evansville Environmental Protection Agency. The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

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The Permittee owns and operates a stationary sporting and athletic goods production source.

Responsible Official:	V.P. of Operations
Source Address:	817 Maxwell Ave., Evansville, Indiana 47711
Mailing Address:	P.O. Box 889, Evansville, Indiana 47706-0889
General Source Phone Number:	(812) 467-1264
SIC Code:	3949
County Location:	Vanderburgh
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

The following operations for the Murrey pool table manufacturing:

- (a) Two (2) finishing spray booths, identified as M 0700 and M 0701, each with a maximum capacity of coating 0.25 wooden pool tables per hour, utilizing High Volume-Low Pressure (HVLP) application with dry filters for overspray control, and exhausting through stacks M 0700s and M 0701s, respectively;
- (b) One (1) gluing/sanding booth, identified as M 0702, with a maximum capacity of coating 1.33 pool tables per hour, utilizing High Volume-Low Pressure (HVLP) application with dry filters for overspray control, and exhausting through one (1) stack (S/V ID: M 0702s); and
- (c) Woodworking operation with a raw material input of 642 pounds per hour, controlled by a pulse-jet baghouse (M 0704) and exhausting inside the building.

### A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British thermal units per hour (mmBtu/hr):
  - (a) one (1) natural gas fired drying tunnel, identified as M 0703, with heat input of 0.32 million British thermal units per hour (MMBtu/hr), exhausting through one (1) stack (S/V ID: M 0703s).

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## SECTION D.1

## FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] - The following surface coating operations at the plant:

- (1) The following surface coating operations at the Table Tennis production line identified as unit #T1:
  - (a) One (1) front spray booth identified as T0178 with a maximum capacity of coating 180 wooden table tennis boards per hour, utilizing High Volume-Low Pressure (HVLP) application with dry filters for overspray control, and exhausting through one (1) stack (S/V ID: T0178s);
  - (b) One (1) UV Fill machine, identified as T0150, with a maximum capacity of 180 wooden table tennis boards per hour, and exhausting through one (1) stack (S/V ID: T0150s);
  - (c) one (1) undercoater, identified as T0153, with a maximum capacity of coating 180 wooden table tennis boards per hour, utilizing roller application, and exhausting through two (2) stacks (S/V ID: T0153As, T0153Bs), respectively;
  - (d) one (1) precision coater, identified as T0154, with a maximum capacity of coating 180 wooden table tennis boards per hour, utilizing roller application, and exhausted through one (1) stack (S/V ID: T0154s);
  - (e) one (1) back striping machine, identified as T0356, with a maximum capacity of striping 38 wooden table tennis boards per hour, utilizing HVLP application, and exhausted inside the plant;
  - (f) one (1) back spray booth, identified as T0362, with a maximum capacity of coating 72 wooden table tennis boards per hour, utilizing HVLP application with dry filters for overspray control and exhausted through one (1) stack (S/V ID: T0362s).
  - (g) one (1) undercoater with an electric oven, identified as T0156, with a maximum capacity of coating 138 wooden table tennis boards per hour, utilizing roller application, and exhausting through one (1) stack (S/V ID: T0156s).
- (2) The following surface coating operations at the Archery Spray Booth production line identified as Unit# ASB:
  - (a) one (1) surface coating booth, identified as AO311, with a maximum capacity of coating 135 fiberglass bow limbs per hour, utilizing HVLP application with dry filters for overspray control, and exhausting through one (1) stack (S/V ID: AO311s).
- (3) The following operations for the Murrey pool table manufacturing:
  - (a) Two (2) finishing spray booths, identified as M 0700 and M 0701, each with a maximum capacity of coating 0.25 wooden pool tables per hour, utilizing High Volume-Low Pressure (HVLP) application with dry filters for overspray control, and exhausting through stacks M 0700s and M 0701s, respectively; and
  - (b) One (1) gluing/sanding booth, identified as M 0702, with a maximum capacity of coating 1.33 pool tables per hour, utilizing High Volume-Low Pressure (HVLP) application with dry filters for overspray control, and exhausting through one (1) stack (S/V ID: M 0702s).

## **Emission Limitations and Standards [326 IAC 2-7-5(1)]**

### **D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]**

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the table tennis surface coating booths identified as T0154, T0356, and T0362, and the pool table finishing spray booths M 0700 and M 0701 shall utilize one of the following application methods:

- Airless Spray Application
- Air Assisted Airless Spray Application
- Electrostatic Spray Application
- Electrostatic Bell or Disc Application
- Heated Airless Spray Application
- Roller Coating
- Brush or Wipe Application
- Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

### **D.1.2 Volatile Organic Compounds (VOC) [326 IAC 2-2] [40 CFR 52.21]**

Any change or modification which may increase source-wide VOC emissions from the surface coating equipment listed in this section, as well as from the equipment listed in Sections D.3 and D.4 of this operating permit to greater than 250 tons per twelve (12) consecutive month period shall require prior approval from the OAQ. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

### **D.1.3 Particulate Matter (PM) [326 IAC 6-1-2(a)]**

The PM emissions from the surface coating booths identified as T0178, T0362, T0356, AO326, and AO311, the finishing spray booths, identified as M 0700 and M 0701 and the gluing/sanding booth, identified as M 0702 shall not exceed 0.03 grains per dry standard cubic foot.

### **D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for M 0700, M 0701, M 0702, T0178, T0362, AO326, and AO311, and their corresponding dry filter control devices.

## **Compliance Determination Requirements**

### **D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)]**

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

### **D.1.6 Volatile Organic Compounds (VOC)**

Compliance with the VOC content and usage limitations contained in Conditions D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, and the Evansville Environmental Protection Agency reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

#### D.1.7 VOC Emissions

Compliance with Conditions D.1.2 shall be demonstrated at the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

### **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

#### D.1.8 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the surface coating booths identified as T0178, T0362, AO326, AO311, the finishing spray booths, identified as M 0700 and M 0701 and the gluing/sanding booth, identified as M 0702 are in operation.

#### D.1.9 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booths (T0178, T0362, AO326, AO311), the finishing spray booths (M 0700 and M 0701) and the gluing/sanding booth (M 0702) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed for the coating emissions from the stack and the presence of overspray on the rooftops and on the nearby ground. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

### **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

#### D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.2.
  - (1) The amount and VOC content of each coating used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used;
  - (2) A log of the dates of use;
  - (3) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Conditions D.1.9 and D.1.10, the Permittee shall maintain a log of weekly overspray observations, monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (1) The following significant machining operations:
- (a) one (1) pool mill shoda router, with a maximum throughput of 1,250 pounds of particle board per hour; utilizing a dust collector (0429) for particulate control, and exhausting through one (1) stack (S/V ID: 0429s);
  - (b) one (1) basketball area powermatic CNC router, with a maximum throughput of 2,500 pounds of particle and acrylic board per hour, utilizing a baghouse (0330) for particulate control, and exhausting through one (1) stack (S/V ID: 0330s);
  - (c) one (1) archery machining operation, and one (1) pool mill machining operation, with a total maximum throughput of 22,000 pounds of fiberglass and particle board per hour, all utilizing one (1) baghouse (0329) for particulate control, and exhausting through one (1) stack (S/V ID: 0329s); and
  - (d) woodworking operation with a raw material input of 642 pounds per hour, controlled by a pulse-jet baghouse (M 0704) and exhausting inside the building.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2, and Evansville EPA Operating Permit #R-008-002-001, issued on February 1, 1995, particulate matter (PM) emissions from the archery machining centers, and pool area machining centers controlled by the dust collector (O329) shall not exceed 0.03 grains per dry standard cubic foot. This is equivalent to a PM emission rate of 5.4 pounds per hour.

#### D.2.2 Particulate Matter (PM) [326 IAC 6-1-2(a)]

Particulate matter (PM) emissions from the woodworking operation, basketball area powermatic CNC router, and pool mill shoda router controlled by baghouse (M 0704), and the dust collectors 0330 and 0429, respectively, shall not exceed 0.03 grains per dry standard cubic foot.

**Indiana Department of Environmental Management  
Office of Air Quality  
and Evansville EPA**

**Technical Support Document (TSD) for a Part 70 Minor Source  
Modification and a Part 70 Minor Permit Modification.**

**Source Background and Description**

Source Name:	Indian Industries, Inc., dba Escalade Sports
Source Location:	817 Maxwell Ave., Evansville, Indiana 47711
County:	Vanderburgh
SIC Code:	3949
Operation Permit No.:	T163-7324-00008
Operation Permit Issuance Date:	March 18, 1999
Minor Source Modification No.:	163-15760-00008
Minor Permit Modification No.:	163-15792-00008
Permit Reviewer:	Alic Bent/EVP

The Office of Air Quality (OAQ) has reviewed a modification application from Indian Industries, Inc., dba Escalade Sports which operates a sporting and athletic goods production plant, relating to the construction of the following emission unit and pollution control device.

- (a) Two (2) finishing spray booths, identified as M 0700 and M 0701, each with a maximum capacity of coating 0.25 wooden pool tables per hour, utilizing High Volume-Low Pressure (HVLP) application with dry filters for overspray control, and exhausting through stacks M 0700s and M 0701s, respectively;
- (b) One (1) gluing/sanding booth, identified as M 0702, with a maximum capacity of coating 1.33 pool tables per hour, utilizing High Volume-Low Pressure (HVLP) application with dry filters for overspray control, and exhausting through one (1) stack (S/V ID: M 0702s);
- (c) Woodworking operation with a raw material input of 642 pounds per hour, controlled by a pulse-jet baghouse (M 0704), and exhausting inside the building ; and
- (d) One (1) natural gas fired drying tunnel, identified as M 0703, with heat input of 0.32 million British thermal units per hour (MMBtu/hr), exhausting through one (1) stack (S/V ID: M 0703s). (an insignificant activity)

**Existing Approvals**

The source was issued a Part 70 Operating Permit T163-7324-00008 on March 18, 1999. The source has since received the following:

- (a) First Administrative Amendment No.: 163-10894, issued July 28, 1999;
- (b) First Minor Permit Modification No.: 163-11792, issued February 25, 2000;
- (c) Second Minor Permit Modification No.: 163-11954, issued May 8, 2000;
- (d) Third Minor Permit Modification No.: 163-12480, issued October 5, 2000;



- (e) Second Administrative Amendment No.: 163-12977, issued December 20, 2000; and
- (f) First Reopening No.: R 163-13505, issued March 13, 2002.

### Enforcement Issue

There are no enforcement actions pending.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
M 0700s	Finishing Booth	28.5	2.5	12,750	Ambient
M 0701s	Finishing Booth	28.5	2.5	12,750	Ambient
M 0702s	Gluing/Sanding Booth	28.5	3.5	21,400	Ambient
M 0703s	Drying Tunnel	28.5	0.67	3,275	140

### Recommendation

The staff recommends to the Commissioner that the Minor Source Modification and the Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on June 17, 2002.

### Emission Calculations

See Appendix A: pages 1 of 5 of this document for detailed emissions calculations

### Potential To Emit of Modification Before Control/Limitation

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential To Emit (tons/year)
PM	116.78
PM-10	116.78
SO <sub>2</sub>	negl.
VOC	11.73
CO	0.1
NO <sub>x</sub>	0.1

HAP's	Potential To Emit (tons/year)
Ethyl Benzene	less than 10
Formaldehyde	less than 10
Methanol	less than 10
Methyl isobutyl ketone ( MIBK)	less than 10
Toluene	less than 10
Xylene	less than 10
TOTAL	less than 25

### Justification for Modification

The Title V permit, is being modified through a Minor Source Modification and Minor Permit Modification. Pursuant to 326 IAC 2-7-10.5(d)(4)(B)(iii) and 326 IAC 2-7-10.5(d)(5)(C), this is a minor source modification for which the potential to emit of VOC is less than twenty-five (25) tons per year and the potential to emit of PM-10 is limited to less than twenty-five (25) tons per year by using a baghouse with better than 99% control efficiency, respectively. The Minor Source Modification will be incorporated into the permit through a Minor Permit Modification.

### County Attainment Status

The source is located in Vanderburgh County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	maintenance
CO	attainment
Lead	not determined

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Vanderburgh County has been designated as maintenance for ozone.
- (b) Vanderburgh County has been classified as attainment for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions  
This type of operation is not one of the 28 listed source categories under 326 IAC 2-2; therefore, the fugitive PM emissions are not counted toward determination of PSD applicability.

## Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	less than 100
PM-10	less than 100
SO <sub>2</sub>	less than 100
VOC	greater than 100, less than 250
CO	less than 100
NO <sub>x</sub>	less than 100

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon the Part 70 permit T163-7324-00008 issued on March 18, 1999.

## Potential to Emit of Modification After Issuance

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units for the modification.

	Potential to Emit (tons/year)							
Process/facility	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	Single HAP	Total HAPs
finishing spray booth (M 0700)	0.48	0.48	-	5.75	-	-	0.49	1.24
finishing spray booth (M 0701)	0.48	0.48	-	5.75	-	-	0.49	1.24
glue/sand booth (M 0702)	0.36	0.36	-	0.23	-	-	-	-
drying tunnel (M 0703)	1.46	1.46	negl.	negl.	0.1	0.1	negl.	negl.
woodworking (1) operation (M 0704)	1.14	1.14	-	-	-	-	-	-
Total Emissions	3.92	3.92	negl.	11.73	0.1	0.1	0.98	2.48
PSD Significant Levels	250	250	250	250	250	40	N/A	N/A

(1) Potential to emit after controls.

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2 and 40 CFR 52.21, the PSD requirements do not apply.

### **Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) The wood surface coating operations at units M 0700 and M 0701 are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart JJ (Wood Furniture Coating Operations). Subpart JJ applies to each facility engaged in the manufacture of wood furniture or wood furniture components, that are major sources of hazardous air pollutants (HAPs). This source is not a major source of hazardous air pollutants (HAPs), therefore, this rule does not apply.

### **State Rule Applicability - Individual Facilities**

#### **326 IAC 2-2 and 40 CFR 52.21 (Prevention of Significant Deterioration (PSD))**

This modification to a minor PSD source is not subject to this rule. This rule applies to modifications with the potential to emit (PTE) greater than or equal to 250 tons per year of any regulated pollutant. This modification has a PTE PM and PM-10 of 3.92 tons per year each and PTE VOC of 11.7 tons per year. Therefore, pursuant to 326 IAC 2-2 and 40 CFR 52.21, the PSD requirements do not apply.

#### **326 IAC 2-4.1-1 (New Sources Toxics Control)**

The two (2) finishing spray booths and the gluing/sanding booth will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1-1 does not apply.

#### **326 IAC 8-1-6 (General Reduction Requirements)**

The two (2) finishing spray booths, identified as M 0700 and M 0701 and the one (1) gluing/sanding booth are not subject to this rule. This rule applies to facilities constructed after January 1, 1980 which have the potential to emit 25 tons per year or more of VOC and are not regulated by any other provisions of 326 IAC 8. The two (2) finishing spray booths are subject to 326 IAC 8-2-12, therefore, 326 IAC 8-1-6 does not apply. The one (1) gluing/sanding booth have the potential to emit less than 25 tons of VOC per year, therefore, this rule does not apply.

#### **326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)**

The two (2) finishing spray booths, identified as M 0700 and M 0701 are subject to this rule. The two (2) finishing booths will both use HVLP application method and both are in compliance with the requirements of 326 IAC 8-2-12.

#### **326 IAC 6-1 (Particulate Limitations)**

This rule applies to specifically listed sources or facilities, or sources or facilities not specifically listed but located in a listed county and having either a potential to emit of 100 tons per year (tpy) or more actual emissions of 10 tpy or more of PM.

The source is located in Vanderburgh County, a specifically listed county. The source and its facilities are not specifically listed at 326 IAC 6-1-16 and, therefore, the requirements of 326 IAC 6-1-16 do not apply.

The woodworking operation, finishing booths (M 0700 and M 0701), and the one (1) gluing/sanding booth (M 0702) are subject to 326 IAC 6-1-2(a). The PM emissions from the woodworking operation, finishing booths and the gluing/sanding booth shall not exceed 0.03 grains per dry standard cubic foot. The baghouse and filters shall be in operation at all times that the processes are in operation in order to comply with this limit.

## Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no Compliance Monitoring Requirements applicable to the Woodworking Operation because the baghouse exhaust inside the building and the allowable PM emissions are less than ten (10) pounds per hour.

The following new compliance requirements were incorporated into this Part 70 permit:

1. The two (2) finishing spray booths, and the one (1) gluing/sanding booth have applicable compliance monitoring conditions as specified below:
  - (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booths stacks while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
  - (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
  - (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the dry filters must operate properly to ensure compliance with 326 IAC 6-1 (Particulate Limitations).

### Changes to the Part 70 Permit

The following changes are made as the Minor Permit Modification to the Part 70 Permit T163-15792-00008. (New is shown in bold and deleted language is shown with a line through it):

1. Section A.2 and A.3 have been revised to include the Murrey pool table manufacturing operation.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]  
[326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (5) The fiberglass basketball backboard closed sheet molding production line identified as Unit# B-1 consisting of the following equipment:

- (a) one (1) 1000 ton W&W press, with a maximum capacity of producing 30 backboards per hour, exhausting inside the plant;
- (b) one (1) 500 ton Onsrud press, with a maximum capacity of producing 7 backboards per hour, exhausting inside the plant; and
- (c) one (1) 508 ton French press, with a maximum capacity of producing 8 backboards per hour, exhausting inside the plant.
- (d) The addition of one (1) new fiberglass basketball acrylic backboards gluing operation, which has a capacity to glue a maximum of 20 backboards per hour, utilizing a special type spray gun, exhausting inside the building.

- (6) **The following operations for the Murrey pool table manufacturing:**

- (a) **Two (2) finishing spray booths, identified as M 0700 and M 0701, each with a maximum capacity of coating 0.25 wooden pool tables per hour, utilizing High Volume-Low Pressure (HVLP) application with dry filters for overspray control, and exhausting through stacks M 0700s and M 0701s, respectively;**
- (b) **One (1) gluing/sanding booth, identified as M 0702, with a maximum capacity of coating 1.33 pool tables per hour, utilizing High Volume-Low Pressure (HVLP) application with dry filters for overspray control, and exhausting through one (1) stack (S/V ID: M 0702s); and**
- (c) **Woodworking operation with a raw material input of 642 pounds per hour, controlled by a pulse-jet baghouse (M 0704) and exhausting inside the building.**

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(15)]

---

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British thermal units per hour (mmBtu/hr):
  - (a) one (1) T-1 table tennis oven, 1.20 mmBtu/hr;
  - (b) one (1) B0105 BB burn-off oven, 0.50 mmBtu/hr;
  - (c) one (1) B0632 BB area 0.51 mmBtu/hr twin chamber, twin burner bake off oven;
  - (d) one (1) Mask washer oven, 0.48 mmBtu/hr;
  - (e) four (4) space heaters each rated at 5.50 mmBtu/hr;
  - (f) one (1) space heater, 4.40 mmBtu/hr;
  - (g) one (1) BB area washer burner, 3.44 mmBtu/hr; ~~and~~
  - (h) one (1) BB area dryoff and curing oven, 4.00 mmBtu/hr; **and**
  - (i) **one (1) natural gas fired drying tunnel, identified as M 0703, with heat input of 0.32 million British thermal units per hour (MMBtu/hr), exhausting through one (1) stack (S/V ID: M 0703s).**

2. Equipment list for section D.1 has been revised to include the Murrey pool table operation.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] - The following surface coating operations at the plant:

- (1) The following surface coating operations at the Table Tennis production line identified as unit #T1:
  - (a) One (1) front spray booth identified as T0178 with a maximum capacity of coating 180 wooden table tennis boards per hour, utilizing High Volume-Low Pressure (HVLP) application with dry filters for overspray control, and exhausting through one (1) stack (S/V ID: T0178s);
  - (b) One (1) UV Fill machine, identified as T0150, with a maximum capacity of 180 wooden table tennis boards per hour, and exhausting through one (1) stack (S/V ID: T0150s);
  - (c) one (1) undercoater, identified as T0153, with a maximum capacity of coating 180 wooden table tennis boards per hour, utilizing roller application, and exhausting through two (2) stacks (S/V ID: T0153As, T0153Bs), respectively;
  - (d) one (1) precision coater, identified as T0154, with a maximum capacity of coating 180 wooden table tennis boards per hour, utilizing roller application, and exhausted through one (1) stack (S/V ID: T0154s);
  - (e) one (1) back striping machine, identified as T0356, with a maximum capacity of striping 38 wooden table tennis boards per hour, utilizing HVLP application, and exhausted inside the plant;
  - (f) one (1) back spray booth, identified as T0362, with a maximum capacity of coating 72 wooden table tennis boards per hour, utilizing HVLP application with dry filters for overspray control and exhausted through one (1) stack (S/V ID: T0362s).
  - (g) one (1) undercoater with an electric oven, identified as T0156, with a maximum capacity of coating 138 wooden table tennis boards per hour, utilizing roller application, and exhausting through one (1) stack (S/V ID: T0156s).
- (2) The following surface coating operations at the Archery Spray Booth production line identified as Unit# ASB:
  - (a) one (1) surface coating booth, identified as AO311, with a maximum capacity of coating 135 fiberglass bow limbs per hour, utilizing HVLP application with dry filters for overspray control, and exhausting through one (1) stack (S/V ID: AO311s).
- (3) **The following operations for the Murrey pool table manufacturing:**
  - (a) **Two (2) finishing spray booths, identified as M 0700 and M 0701, each with a maximum capacity of coating 0.25 wooden pool tables per hour, utilizing High Volume-Low Pressure (HVLP) application with dry filters for overspray control, and exhausting through stacks M 0700s and M 0701s, respectively;**
  - (b) **One (1) gluing/sanding booth, identified as M 0702, with a maximum capacity of coating 1.33 pool tables per hour, utilizing High Volume-Low Pressure (HVLP) application with dry filters for overspray control, and exhausting through one (1) stack (S/V ID: M 0702s).**



3. Conditions D.1.1, D.1.2, D.1.3, D.1.4, D.1.8, D.1.9 and D.1.10 have been revised.

### **Emission Limitations and Standards [326 IAC 2-7-5(1)]**

#### **D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]**

---

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the table tennis surface coating booths identified as T0154, T0356, and T0362, **and the pool table finishing spray booths M 0700 and M 0701** shall utilize one of the following application methods:

- Airless Spray Application
- Air Assisted Airless Spray Application
- Electrostatic Spray Application
- Electrostatic Bell or Disc Application
- Heated Airless Spray Application
- Roller Coating
- Brush or Wipe Application
- Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

#### **D.1.2 Volatile Organic Compounds (VOC) [326 IAC 2-2] [40 CFR 52.21]**

---

Any change or modification which may increase source-wide VOC emissions from the surface coating equipment listed in this section, as well as from the equipment listed in Sections D.3 and D.4 of this operating permit to greater than 250 tons per twelve (12) consecutive month period shall require prior approval from the ~~ESAM~~ **OAQ**. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

#### **D.1.3 Particulate Matter (PM) [326 IAC 6-1-2(a)]**

---

The PM emissions from the surface coating booths identified as T0178, T0362, T0356, AO326, and AO311, **the finishing spray booths, identified as M 0700 and M 0701 and the gluing/sanding booth, identified as M 0702** shall not exceed 0.03 grains per dry standard cubic foot.

#### **D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

---

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for **M 0700, M 0701, M 0702**, T0178, T0362, AO326, and AO311, and their corresponding dry filter control devices.

### **Compliance Determination Requirements**

#### **D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)]**

---

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.1.6 Volatile Organic Compounds (VOC)

---

Compliance with the VOC content and usage limitations contained in Conditions D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, and the Evansville Environmental Protection Agency reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

#### D.1.7 VOC Emissions

---

Compliance with Conditions D.1.2 shall be demonstrated at the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.1.8 Particulate Matter (PM)

---

The dry filters for PM control shall be in operation at all times when the surface coating booths identified as T0178, T0362, AO326, AO311, **the finishing spray booths, identified as M 0700 and M 0701 and the gluing/sanding booth, identified as M 0702** are in operation.

#### D.1.9 Monitoring

---

- (a) **Daily** ~~Weekly~~ inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, ~~daily monometer pressure checks shall be performed on~~ **weekly observations** shall be made of the overspray from the surface coating booths (T0178, T0362, AO326, AO311), **the finishing spray booths (M 0700 and M 0701) and the gluing/sanding booth (M 0702)** while one or more of the booths are in operation. ~~The pressure drop across each booth shall be maintained within the range specified within the Compliance Response Plan.~~ The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed for **the coating emissions from the stack and** the presence of overspray on the rooftops ~~from the surface coating booth stacks (T0178, T0362, AO326, AO311) and~~ on the nearby ground. ~~and annual inspections shall be performed for the presence of overspray on the rooftop. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step.~~ **The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.**
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

4. Record keeping has been added for the “soft” limit in Condition D.1.2.

#### **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

##### **D.1.10 Record Keeping Requirements**

- 
- (a) **To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.2.**
- (1) **The amount and VOC content of each coating used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used;**
- (2) **A log of the dates of use;**
- (3) **The weight of VOCs emitted for each compliance period.**
- (~~a~~b) **To document compliance with Conditions D.1.9 and D.1.10, the Permittee shall maintain a log of weekly overspray observations, ~~daily monometer pressure drop readings,~~ monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.**
- (c) **All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.**

4. Equipment list for section D.2 has been revised to include the woodworking operation.

#### **SECTION D.2 FACILITY OPERATION CONDITIONS**

##### **Facility Description [326 IAC 2-7-5(15)]**

- (1) **The following significant machining operations:**
- (a) **one (1) pool mill shoda router, with a maximum throughput of 1,250 pounds of particle board per hour; utilizing a dust collector (0429) for particulate control, and exhausting through one (1) stack (S/V ID: 0429s);**
- (b) **one (1) basketball area powermatic CNC router, with a maximum throughput of 2,500 pounds of particle and acrylic board per hour, utilizing a baghouse (0330) for particulate control, and exhausting through one (1) stack (S/V ID: 0330s); ~~and~~**
- (c) **one (1) archery machining operation, and one (1) pool mill machining operation, with a total maximum throughput of 22,000 pounds of fiberglass and particle board per hour, all utilizing one (1) baghouse (0329) for particulate control, and exhausting through one (1) stack (S/V ID: 0329s); ~~and~~**
- (d) **woodworking operation with a raw material input of 642 pounds per hour, controlled by a pulse-jet baghouse (M 0704) and exhausting inside the building.**

5. Condition D.2.2 has been revised.

### **Emission Limitations and Standards [326 IAC 2-7-5(1)]**

#### **D.2.1 Particulate Matter (PM) [326 IAC 6-1-2]**

---

Pursuant to 326 IAC 6-1-2, and Evansville EPA Operating Permit #R-008-002-001, issued on February 1, 1995, particulate matter (PM) emissions from the archery machining centers, and pool area machining centers controlled by the dust collector (O329) shall not exceed 0.03 grains per dry standard cubic foot. This is equivalent to a PM emission rate of 5.4 pounds per hour.

#### **D.2.2 Particulate Matter (PM) [326 IAC 6-1-2(a)]**

---

Particulate matter (PM) emissions from the **woodworking operation**, basketball area powermatic CNC router, and pool mill shoda router controlled by **baghouse (M 0704)**, and the dust collectors 0330 and 0429, respectively, shall not exceed 0.03 grains per dry standard cubic foot.

### **Conclusion**

The addition/construction of this Murrey pool table manufacturing operation shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 163-15760-00008 and Part 70 Minor Permit Modification No. 163-15792-00008.

**Appendix A: Emission Calculations  
VOC and Particulate  
From Surface Coating**

**Company Name:** Indian Industries, Inc., dba Escalade Sports  
**Plant Location:** 817 Maxwell Ave, Evansville Indiana 47711  
**County:** Vanderburgh  
**MSM #:** 163-15760-00008  
**Permit Reviewer:** AB/EVP  
**Date:** June 27, 2002

Uncontrolled Potential Emissions																		
Material (as applied)	Product Coated	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	Lb VOC /gal solids	Application Method	Transfer Efficiency
<b>Finishing Booth - M 0700</b>																		
Die Stain Walnut	Wood	6.77	97.10%	0.00%	97.10%	0.00%	1.60%	0.090	0.25	6.6	6.57	0.15	3.55	0.65	0.00	547.81	HVLP	75.00%
Wiping Stain Walnut	Wood	7.19	65.30%	0.00%	65.30%	0.00%	27.40%	0.090	0.25	4.7	4.70	0.11	2.54	0.46	0.06	22.85	HVLP	75.00%
Lovoc Lacquer Sand Sealer	Wood	7.30	75.50%	0.00%	75.50%	0.00%	17.30%	0.289	0.25	5.5	5.51	0.40	9.56	1.74	0.14	42.48	HVLP	75.00%
Lovoc Lacquer	Wood	7.43	74.20%	0.00%	74.20%	0.00%	18.60%	0.289	0.25	5.5	5.51	0.40	9.56	1.74	0.15	39.52	HVLP	75.00%
WW Conversion Varnish	Wood	7.91	56.90%	0.00%	56.90%	0.00%	34.40%	0.140	0.25	4.5	4.50	0.16	3.78	0.69	0.13	17.44	HVLP	75.00%
Catalyst	Wood	8.01	63.80%	4.50%	59.30%	2.20%	25.20%	0.004	0.25	4.9	4.75	0.00	0.11	0.02	0.01			
Opex Lacquer Thinner	Wood	6.59	100.00%	0.00%	100.00%	0.00%	0.00%	0.063	0.25	6.6	6.59	0.10	2.49	0.45	0.00			
<b>Finishing Booth - M 0701</b>																		
Die Stain Walnut	Wood	6.77	97.10%	0.00%	97.10%	0.00%	1.60%	0.090	0.25	6.6	6.57	0.15	3.55	0.65	0.00	547.81	HVLP	75.00%
Wiping Stain Walnut	Wood	7.19	65.30%	0.00%	65.30%	0.00%	27.40%	0.090	0.25	4.7	4.70	0.11	2.54	0.46	0.06	22.85	HVLP	75.00%
Lovoc Lacquer Sand Sealer	Wood	7.30	75.50%	0.00%	75.50%	0.00%	17.30%	0.289	0.25	5.5	5.51	0.40	9.56	1.74	0.14	42.48	HVLP	75.00%
Lovoc Lacquer	Wood	7.43	74.20%	0.00%	74.20%	0.00%	18.60%	0.289	0.25	5.5	5.51	0.40	9.56	1.74	0.15	39.52	HVLP	75.00%
WW Conversion Varnish	Wood	7.91	56.90%	0.00%	56.90%	0.00%	34.40%	0.140	0.25	4.5	4.50	0.16	3.78	0.69	0.13	17.44	HVLP	75.00%
Catalyst	Wood	8.01	63.80%	4.50%	59.30%	2.20%	25.20%	0.004	0.25	4.9	4.75	0.00	0.11	0.02	0.01			N/A
Opex Lacquer Thinner	Wood	6.59	100.00%	0.00%	100.00%	0.00%	0.00%	0.063	0.25	6.6	6.59	0.10	2.49	0.45	0.00			N/A
<b>Glue Sand Booth - M 0702</b>																		
3M Fastbond 100 Adhesive	Cloth/Slate	9.2	61.20%	55.00%	6.20%	60.50%	38.00%	0.07	1.33	1.4	0.57	0.05	1.27	0.23	0.36	2.00	HVLP	75.00%
<b>Total Potential Emissions:</b>												<b>2.69</b>	<b>64.45</b>	<b>11.76</b>	<b>1.37</b>			

Methodology:

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids) \* Transfer Efficiency

**Appendix A: Emission Calculations**  
**HAP Emission Calculations**  
**Company Name:** Indian Industries, Inc., dba Escalade Sports  
**Address City IN Zip:** 817 Maxwell Ave, Evansville Indiana 47711  
**MSM#:** 163-15760-00008  
**Permit Reviewer:** AB/EVP  
**Date:** June 27, 2002

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Ethyl Benzene	Weight % MIBK	Weight % Methanol	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	MIBK Emissions (ton/yr)	Methanol Emissions (ton/yr)
<b>Finishing Booth - M 0700</b>															
Die Stain Walnut	6.77	0.090	0.25	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Wiping Stain Walnut	7.19	0.090	0.25	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Lovoc Lacquer Sand Sealer	7.30	0.289	0.25	5.80%	0.00%	0.00%	1.00%	3.60%	3.60%	0.13	0.00	0.00	0.02	0.08	0.08
Lovoc Lacquer	7.43	0.289	0.25	3.00%	0.00%	0.00%	0.50%	0.00%	3.00%	0.07	0.00	0.00	0.01	0.00	0.07
WW Conversion Varnish	7.91	0.140	0.25	40.60%	5.50%	0.30%	7.20%	0.00%	0.00%	0.49	0.07	0.00	0.09	0.00	0.00
Catalyst	8.01	0.004	0.25	0.00%	0.00%	0.00%	0.00%	3.50%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Opex Lacquer Thinner	6.59	0.063	0.25	5.20%	14.90%	0.00%	0.90%	0.00%	3.20%	0.02	0.07	0.00	0.00	0.00	0.01
<b>Finishing Booth - M 0701</b>															
Die Stain Walnut	6.77	0.090	0.25	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Wiping Stain Walnut	7.19	0.090	0.25	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Lovoc Lacquer Sand Sealer	7.30	0.289	0.25	5.80%	0.00%	0.00%	1.00%	3.60%	3.60%	0.13	0.00	0.00	0.02	0.08	0.08
Lovoc Lacquer	7.43	0.289	0.25	3.00%	0.00%	0.00%	0.50%	0.00%	3.00%	0.07	0.00	0.00	0.01	0.00	0.07
WW Conversion Varnish	7.91	0.140	0.25	40.60%	5.50%	0.30%	7.20%	0.00%	0.00%	0.49	0.07	0.00	0.09	0.00	0.00
Catalyst	8.01	0.004	0.25	0.00%	0.00%	0.00%	0.00%	3.50%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Opex Lacquer Thinner	6.59	0.063	0.25	5.20%	14.90%	0.00%	0.90%	0.00%	3.20%	0.02	0.07	0.00	0.00	0.00	0.01
<b>Glue Sand Booth - M 0702</b>															
3M Fastbond 100 Adhesive	9.2	0.07	1.33	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
										<b>1.44</b>	<b>0.27</b>	<b>0.007</b>	<b>0.25</b>	<b>0.17</b>	<b>0.34</b>

## Appendix A: Emissions Calculations

### Natural Gas Combustion Only

MM BTU/HR <100

### Drying Tunnel (M 0703)

**Company Name:** Indian Industries, Inc., dba Escalade Sports

**Address City IN Zip:** 817 Maxwell Ave, Evansville Indiana 47711

**MSM #:** 163-15760-00008

**Reviewer:** AB/EVP

**Date:** June 27, 2002

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

0.3

2.8

Pollutant						
Emission Factor in lb/MMCF	PM* 1.9	PM10* 7.6	SO2 0.6	NOx 100.0	VOC 5.5	CO 84.0
Potential Emission in tons/yr	0.0	0.0	0.0	0.1	0.0	0.1

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only**

Page 4 of 5 TSD App A

**MM BTU/HR <100**

**Small Industrial Boiler**

**HAPs Emissions**

**Company Name:** Indian Industries, Inc., dba Escalade Sports

**Address City IN Zip:** 817 Maxwell Ave, Evansville Indiana 47711

**MSM #:** 163-15760-00008

**Reviewer:** AB/EVP

**Date:** June 27, 2002

**HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	2.943E-06	1.682E-06	1.051E-04	2.523E-03	4.765E-06

**HAPs - Metals**

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	7.008E-07	1.542E-06	1.962E-06	5.326E-07	2.943E-06

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.  
Additional HAPs emission factors are available in AP-42, Chapter 1.4.



**Appendix A: Process Particulate Emissions**

**Company Name:** Indian Industries, Inc. dba Escalade Sports  
**Address City IN Zip:** 817 Maxwell Ave., Evansville, IN 47711  
**MSM:** 163-15760-00008  
**Reviewer:** Alic Bent/EVP  
**Date:** July 5, 2002

<b>Uncontrolled Potential Emissions (tons/year)</b>					
<b>A. Baghouses</b>					
Process	No. of Units	Grain Loading per Actual Cubic Foot of Outlet Air	Air Flow Rate (acfm)	Control Efficiency	Total (tons/yr)
Woodworking	1	0.00253	12000.0	99.00%	113.98
Total Emissions Based on Rated Capacity at 8,760 Hours/Year					
<b>Controlled Emissions (tons/year)</b>					
<b>A. Baghouses</b>					
Process	No. of Units	Grain Loading per Actual Cubic Foot of Outlet Air	Air Flow Rate (acfm)	Control Efficiency	Total (tons/yr)
Woodworking	1	0.00253	12000.0	99.00%	1.14

Methodology:Uncontrolled Emissions:

Baghouse (tons/yr) = No. Units \* Loading (grains/acf) \* Air Flow rate (acfm) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs \* 1/(1-Control Efficiency)

Controlled Emissions:

Baghouse (tons/yr) = No. Units \* Loading (grains/acf) \* Air Flow rate (acfm) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs